

Work Order ID 57788

April 14, 2010 3:03:28 PM



Page 1

Item ID: D205-634-041

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 14/04/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 05/05/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: *PF*Date: *10-4-14*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2580	Rev D

100



0.00

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002

N/A *JF*

110



0.00

BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio FT009

2-Cut tubes as per Dwg. D2580

J *4/10/14*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 ...Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Page 2

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Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

120

Operation
Description

Skidtubes

Skidtubes

Set Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

Memo

0.00

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

10-4-21

130



QC5- Inspect part completeness to step on W/O

0.00

0.00

Memo

QC

Quality Control

S. oboul/21



W/O:		WORK ORDER CHANGES					
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Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

140

Operation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Skidtubes

Skidtubes

Memo

0.00

1-Weld step D2576 as per Dwg. D2580 and QSI 004
A/R□□□ Aluminum Rod

M113207 AE 10/04/28

2-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI 004.

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill
A/R□□□ Aluminum Rod

M113207 AE 10/04/28

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64",
adjust stopper not to hit web. Deburr

MB 10/04/29

5-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580.
Deburr holes

6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Deburr

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Deburr

W/O:

			WORK ORDER CHANGES					
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Page 4

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Tooling: _____

Date: _____

Run Start

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

150



QC

Quality Control

Operation
Description

QC10- Inspect visual per QSI004- ground welds

Memo

Set Up/
Run Hours

0.00

0.00

Draw
Number

Rev.

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

S104130

160



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

S104130

(41)

170



HandFinish

Hand Finishing

Pressure Wash per QSI005 4.3

Memo

0.00

0.00

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

=7 M-L 10/05/03 (16)

W/O:		WORK ORDER CHANGES					
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Page 5

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Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

180



Powdercoat

Powder Coating

Operation
Description

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

M114207

Set Up/
Run Hours

0.00

Draw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190



QC

Quality Control

QC3- Inspect Part Finish

0.00

=7 m.h 10/05/04

(1X)

Memo

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 6

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Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

200

Operation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

HandFinish

Memo

0.00

Hand Finishing:

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates

A/R Sikaflex-291 Sikaflex expire date: 10/08

M112429

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive

A/R Sikaflex-291 Sikaflex expire date: 10/08

M112429

5-Wing Walk as per Dwg D2580 and QSI 005 4.4
Batch: M113545M-L
10/05/04

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April 14, 2010 3:03:28 PM



Page 7

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Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



Stop



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

210



QC

Quality Control

Operation
Description

QC5- Inspect part completeness to step on W/O

Set Up/
Run Hours

0.00

Draw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

10/05/05

WU

220



Packaging

Packaging

0.00

10/05/13 C

Packaging

Memo

0.00

Identify and pack for shipping as per PPPD205-634-041

Location: PPD Rev: 57135

230



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/05/17 JJ

RM 10-513
J

W/O:		WORK ORDER CHANGES							
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Picklist Print

Page 1

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Start Date: 14/04/2010

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Comments: IPP Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30 KJ
IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD
IPP Rev. O 06.02.28 Added paperwork EC
IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Qty: 1.00

Required Qty: 1.00

D2580-1



Manufactured No

110 Each 3.0000 1.0000



205 Skidtube bent detail

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

LG	3	
57028	2	
57188	1	

1357327 ① 4/10/21

D2576-3



Manufactured No

140 Each 121.0000 1.0000



Step (machining detail)

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

LG	121	
46661	73	
52215	48	

① BE 10/04/28

D2579



Manufactured No

140 Each 113.0000 20.0000



Crossbolt Spacer

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

LG	113	
57052	113	

② 57348

② 20

BE 10/04/28

Picklist Print

April 14, 2010 3:03:33 PM

Page 2

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IPP Rev. O 06.02.28 Added paperwork EC
IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 14/04/2010

Required Date: 05/05/2010

Start Qty: 1.00

Required Qty: 1.00

D2855



Manufactured No

200

Each

118.0000 1.0000



Cap

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

FP6	2	
-----	---	--

56613

2

Main Warehouse

ST026	116	
-------	-----	--

50513

1

50770

30

51539 ✓

31

53791

54

AN3-5A



Purchased No

200

Each

1,017.000 2.0000



Bolt

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

ST350	1017	
-------	------	--

105057 ✓

1017

M-L
10/05/04

10/05/04

2X M-L

W/O:		WORK ORDER CHANGES					
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IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Required Qty: 1.00

AN960JD10L



Purchased

No

200

Each

4,591.000 2.0000



Washer

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

ST348

Loc Qty

4591

Loc Code

110985 ✓

4591

10/05/04

ALS7-1032-130



Purchased

No

200

Each

359.0000 50.0000



Insert

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

ST282

Loc Qty

M 114407

Loc Code

113238

359

359

50X M-L
10/05/04

AN3C4A



Purchased

No

200

Each

1,449.000 50.0000



BOLT

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

ST350

Loc Qty

M 114416

Loc Code

113226

1449

114103

50

114108

501

114330

400

498

50X M-L
10/05/04

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IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Required Qty: 1.00

AN960C10L



washer

D3566-13



Gasket

Purchased No

NAS1149C0332Q

200

Each

0.0000

50.0000



50X m-k
10/05/04

Manufactured No

200

Each

52.0000

1.0000



D3566-5



Gasket

Manufactured No

53461 ✓

200

Each

10.0000



1X m-k

10/05/04

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

FP

53461 ✓

52

52

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

FP015

56829

10

10

B57526

1X m-k

10/05/04

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IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Qty: 1.00

Required Qty: 1.00

D3566-1



Manufactured No

200

Each

25.0000

2.0000



Gasket

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
Main Warehouse	B 57715	
FP015	25	
56825	3	
57257	22	

2x m-f
10/05/04

D3564-11



Manufactured No

200

Each

14.0000

1.0000



Wearshoe

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
Main Warehouse		
FP019	14	
Main Warehouse		
FP19	14	
56834	1	
57259 ✓	13	

10/05/04

1x m-f

W/O:		WORK ORDER CHANGES					
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IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Required Qty: 1.00

D3564-13

Manufactured No

200

Each

21.0000

1.0000



Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

FP 3

56285 3

Main Warehouse

FPI7 18

56533 ✓ 18

D3564-9

Manufactured No

200

Each

12.0000

1.0000



Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

FP 1

55334 1

Main Warehouse

FPI9 11

57260 11

W/O:		WORK ORDER CHANGES					
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IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

D3564-5



Manufactured No

200

Each

12.0000

1.0000



Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

OFFSHORE

FG

B 57729

2

1x m-l

10/05/04

34806

2

Main Warehouse

FP

10

55024

1

55333

9

D2594-3



Manufactured No

200

Each

204.0000

16.0000



O-Ring, 205 Skidtube

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

FP

204

55546

204

B 58191

16x mrk

10/05/04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

•April 14, 2010 3:03:33 PM

Page 8

Work Order ID: 57788



Parent Item: D205-634-041



Parent Item Name: Replacement Skidtube

Comments: IPP Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30 KJ
IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD
IPP Rev. O 06.02.28 Added paperwork EC
IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 14/04/2010

Required Date: 05/05/2010

Start Qty: 1.00

Required Qty: 1.00

D2594-1



Manufactured No

200

Each

411.0000 16.0000



Plug, 205 Skidtube

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse	1357826	
FP	411	
42807	112	
55002	299	

16X M-F
10/05/04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>#</i>	DRAWN BY <i>RH</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D2580	REV. D SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY	SCALE NTS
A.	96.09.16	NEW ISSUE	
B	96.12.02	AS MANUFACTURED	
C	98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	

RELEASED
07.06.28 *#*

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AEELS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *57788*
BS 10-4-14

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:
SEE NOTES ON
PAGE 2 FOR D2580-041 AND
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

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W/O:

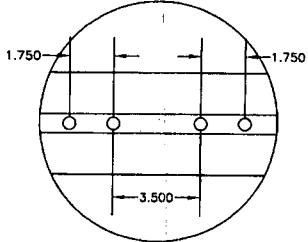
		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

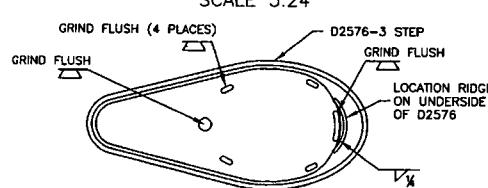
NOTE: Date & initial all entries

DETAIL A
SCALE 5:24

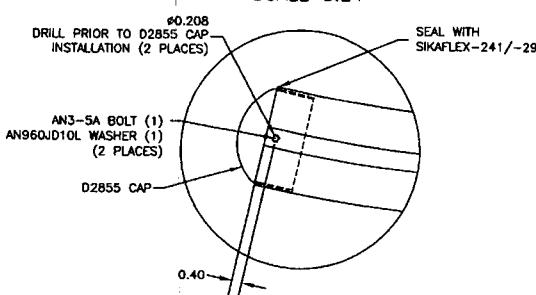


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07-06-28-44

DETAIL B
SCALE 5:24

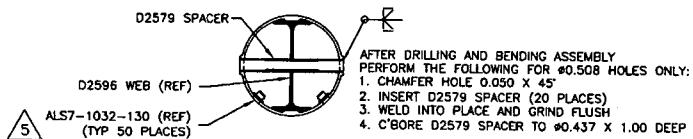


DETAIL C
SCALE 5:24



410 57788

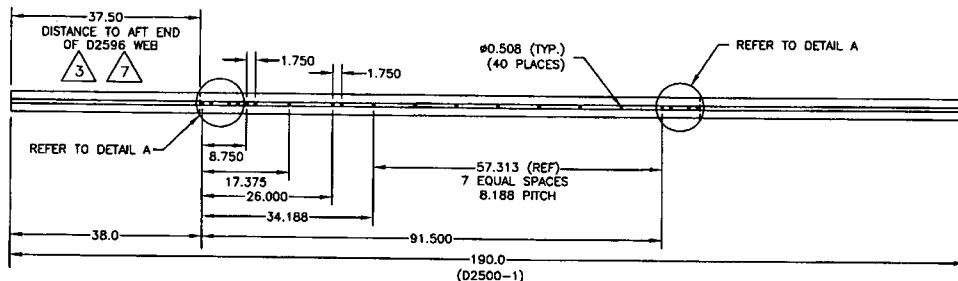
SECTION D-D



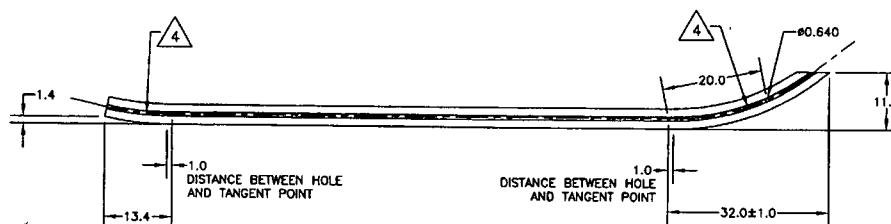
D2580-041 NOTES

i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB POWDER COAT ASSEMBLY GLOSS WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3 BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

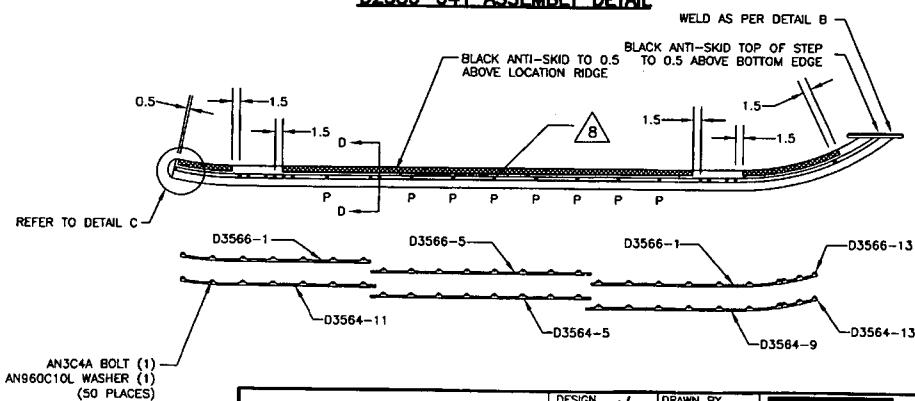
D2580-1 DRILLING DETAIL



D2580-1 BENDING AND CUTTING DETAIL



D2580-041 ASSEMBLY DETAIL



AN3C4A BOLT (1)
AN960C10L WASHER (1)
(SO PLACES)

CONTINUE TO PAGE 1200 FOR PAGE 1200A

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COPYRIGHT © 1996 BY DART AEROSPACE LTD.		DESIGN <i>H</i>	DRAWN BY <i>AH</i>	DART	DART AEROSPACE LTD. HAZELBURY, ONTARIO, CANADA	
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		DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY	SCALE 1:24	

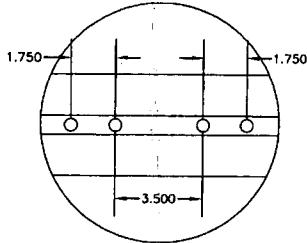
W/O:		WORK ORDER CHANGES					
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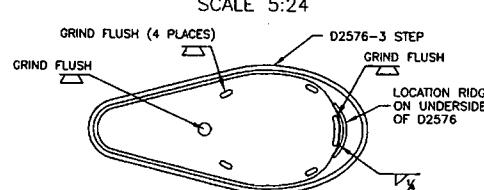
NOTE: Date & initial all entries

DETAIL E
SCALE 5:24

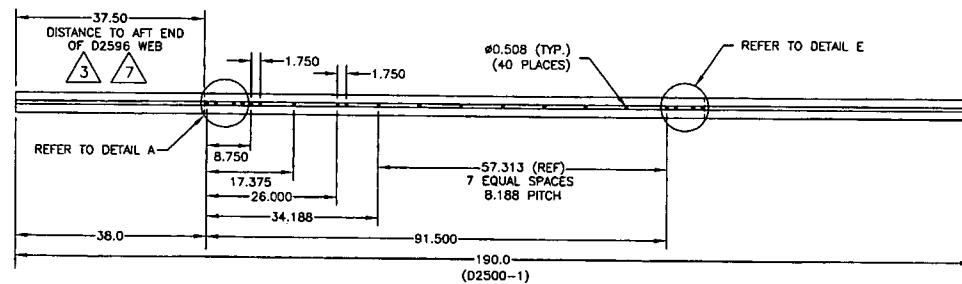


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07-16-28

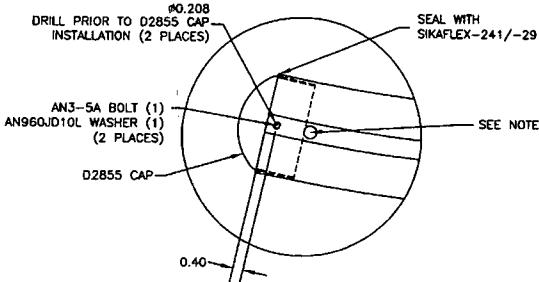
DETAIL F
SCALE 5:24



D2580-1 DRILLING DETAIL

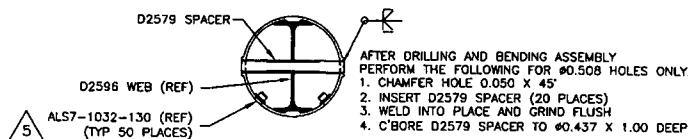


DETAIL G
SCALE 5:24



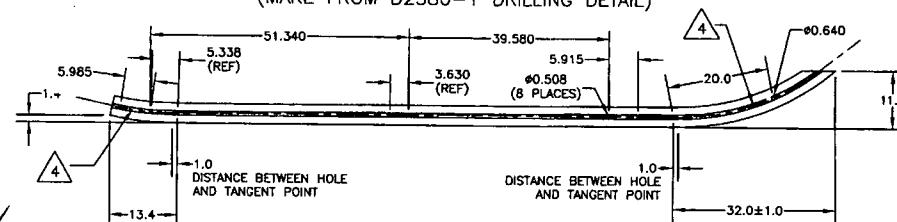
w/o 57788

SECTION H-H
SCALE 5:24

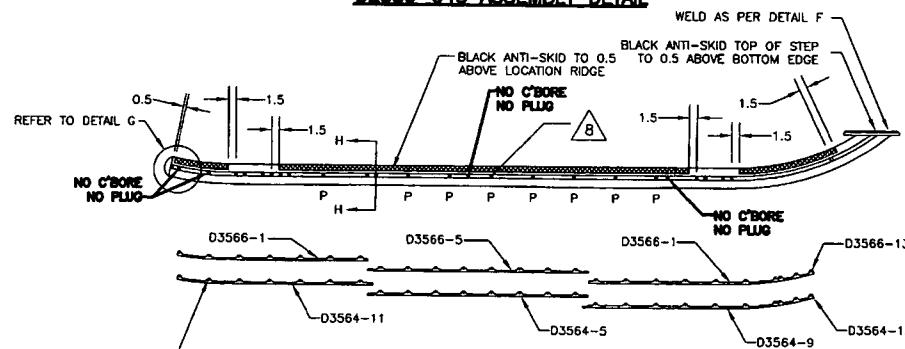


AN3C4A BOLT (1)
AN960C10L WASHER (1)
(50 PLACES)

D2580-5 BENDING AND CUTTING DETAIL
(MAKE FROM D2580-1 DRILLING DETAIL)



D2580-045 ASSEMBLY DETAIL



D2580-045 NOTES

- FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4
- IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE
WITH THE SPACER AT THIS LOCATION

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CHECKED
APPROVED
DATE
07.02.27

RH
RH
H
H
TITLE
205 SKIDTUBE ASSEMBLY



DART AEROSPACE LTD.
HAWKESBURY, ONTARIO, CANADA

REV. D
SHEET 3 OF 3
SCALE
1:24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

NO. 20

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 576830
Part number: D205-634.041
Description: 205 skid tube
Welding Process: Tig[] Mig[]
Base material: Aluminum
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[] fail[]
Penetration: pass[] fail[]

UNACCEPTABLE

Cracks: pass[] fail[]
Undercut: pass[] fail[]
Pin holes: pass[] fail[]
Overlap (cold lap) pass[] fail[]
Porosity (surface): pass[] fail[]
Coloration: pass[] fail[]

Qualifier Barclay Elliott Date of Test Coupon 10.04.27

Welder Barclay Elliott Date of Test Coupon 10.04.27

The above named individual is qualified in accordance with AWS D17.1.2001 to weld